

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

an image forming unit provided detachably and including
a photoconductor provided rotatably, charging means for charging
5 the photoconductor to a uniform potential, and developing means
for supplying a toner to an electrostatic latent image formed
on the charged photoconductor to form the electrostatic latent
image into a visible image;

an endless intermediate transfer member which is provided
10 in such a manner as to be capable of abutting against the
photoconductor and is adapted to rotate in loop form by being
supported in a tension-adjusted state by a plurality of rollers,
and onto which a toner image developed on the photoconductor
is transferred; and

15 electric supply means which is electrically and
mechanically connected to the image forming unit through
terminals to supply predetermined electric power to the
photoconductor, the charging means, and the developing means
of the image forming unit,

20 wherein the image forming unit is moved in a widthwise
direction of the intermediate transfer member so as to be
connected to the electric supply means.

2. An image forming apparatus comprising:

an image forming unit installed in a main body of the image forming apparatus and including a photoconductor drum, a charging roller for charging the photoconductor drum, and a developing roller for forming an electrostatic latent image formed on the photoconductor drum into a visible image by a toner;

a power supply unit provided in the main body of the image forming apparatus to supply electric power to the image forming unit; and

a transfer belt which is provided in the main body of the image forming apparatus and onto which the toner image developed on the photoconductor drum is transferred,

wherein a direction in which the image forming unit is installed in the image forming apparatus is a direction parallel to a portion of a surface of the transfer belt, and electrical contact between the power supply unit and the image forming unit is effected in the installing direction at an end portion in the installing direction of the image forming unit.

3. The image forming apparatus according to claim 2, wherein the photoconductor drum and the main body of the image forming apparatus are mechanically connected at the end portion in the installing direction of the image forming unit, and a driving force of the photoconductor drum is supplied from the main body of the image forming apparatus through the mechanical

connection.

4. The image forming apparatus according to claim 3,
wherein a direction of the electrical connection is parallel
5 to the installing direction and a direction of the mechanical
connection.

5. The image forming apparatus according to claim 2,
wherein a plurality of image forming units are provided as the
10 image forming unit in parallel to the portion of the surface
of the transfer belt.

6. An image forming apparatus comprising:
an image forming unit installed in a main body of the image
15 forming apparatus and including a photoconductor drum, a charging
roller for charging the photoconductor drum, and a developing
roller for forming an electrostatic latent image formed on the
photoconductor drum into a visible image by a toner; and

a power supply unit provided in the main body of the image
20 forming apparatus to supply electric power to the image forming
unit,

wherein the photoconductor drum, the charging roller, and
the developing roller are provided in parallel to a longitudinal
direction of the image forming unit,

the image forming unit has longitudinally connecting means for mechanically connecting the power supply unit and the image forming unit in the longitudinal direction at an end portion in the longitudinal direction of the image forming unit, and

5 the supply of the electric power from the power supply unit to the image forming unit is effected through the longitudinally connecting means.

7. The image forming apparatus according to claim 6,
10 wherein the photoconductor drum and the main body of the image forming apparatus are mechanically connected at the end portion of the image forming unit, and a driving force of the photoconductor drum is supplied from the main body of the image forming apparatus through the mechanical connection.

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8. The image forming apparatus according to claim 7, wherein a direction of connection between the power supply unit and the image forming unit by the longitudinally connecting means is parallel to the longitudinal direction and a direction of
20 the mechanical connection between the photoconductor drum and the main body of the image forming apparatus.

9. The image forming apparatus according to claim 6, wherein a plurality of image forming units are provided as the

image forming unit in parallel to the longitudinal direction.

10. The image forming apparatus according to claim 6,
wherein the main body of the image forming apparatus has a transfer
5 belt onto which the toner image developed on the photoconductor
drum is transferred, and

pressing-force adjusting means for pressing the
photoconductor drum and the transfer belt at contact surfaces
thereof with uniform pressure is provided at the end portion
10 in the longitudinal direction of the image forming unit.

11. An image forming apparatus comprising:

a photoconductor which is provided rotatably and on which
an electrostatic latent image is formed into a visible image
15 to form a toner image;

charging means which is supported by an electrically
conductive bearing and rotates accompanying the photoconductor,
the charging means being adapted to charge a surface of the
photoconductor to a uniform potential by receiving electric
20 supply from electric supply means; and

a coil spring which is brought into pressure contact with
the bearing to press the charging means against the
photoconductor through the bearing, the coil spring having a
connecting end portion which is formed in such a manner as to

extend in a rod shape and is electrically connected to a main body-side conductive member for carrying electric power from the electric supply means.

- 5 12. The image forming apparatus according to claim 11, further comprising: a connecting slot member which restricts the movement of the connecting end portion, and into which the main body-side conductive member is fitted with a distal end thereof abutting against the connecting end portion.

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